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EXAMINER

FERNANDES, CHERYL M

ART UNIT	PAPER NUMBER
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2171

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/033,215

Applicant(s)

VISHIK, CLAIRE S.

Examiner

Cheryl M Fernandes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4 and 6.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Referring to claim 18, the limitations “determining a threshold usage value” and “determining an actual usage value” are recited. However, the specification fails to define usage values in terms of actual and threshold values.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-36 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

3. Referring to claim 1, the claim recites a method for adaptably maintaining a taxonomy defined by a plurality of nodes arranged hierarchically. However, the claim describes a mathematical modeling technique, which is an abstract idea, without need for physical computing equipment and therefore constitutes non-statutory subject matter. Examiner suggests the use of “computer implemented method” in place of “method” in order to make this claim describe statutory subject matter.

4. Referring to claim 18, the claim recites a method for maintaining a dynamic taxonomy. However, like claim 1, claim 18 describes a mathematical modeling technique, which is an abstract idea, without need for physical computing equipment

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and therefore constitutes non-statutory subject matter. Examiner suggests the use of "computer-implemented method" in place of "method" in order to make this claim describe statutory subject matter.

5. Referring to claim 21, the claim recites logic encoded in media for adaptably maintaining a taxonomy defined by a plurality of nodes arranged hierarchically. However, this claim discloses logic encoded in media but not a computer readable medium. For example, media could take the form of transit media wherein a carrier wave can be encoded onto it. Since the claim does not specifically disclose logic tangibly embodied in a *computer-readable* medium, it therefore constitutes non-statutory matter.

6. Referring to claim 37, the claim recites a system for adaptably maintaining a taxonomy defined by a plurality of nodes arranged hierarchically. However, the specification does not indicate that the means for determining threshold and level of access values, as well as comparing the two values to be performed by hardware applications. Instead the specification discloses the implementation of these means solely by software applications, thereby making the claim constitute non-statutory subject matter. Examiner suggests the use of "computer-implemented system" in place of "system" in order to make this claim describe statutory subject matter.

To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of the invention.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 1-7, 21-23, 34, and 37 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for determining a threshold access value (see Fig. 2A-2B for 'Threshold' values in the nodes), does not reasonably provide enablement for determining a level of access value. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make or use the invention commensurate in scope with these claims. For example, referring to Fig. 2A-2B, it is unclear as to which of the access values, average or actual, the level of access is defined to be.
8. Claim 12 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for frequently used access devices that influence levels of access (see para. 13 and 20 of the instant specification), does not reasonably provide enablement for a sum of different devices' Ids computed for a predetermined interval of time. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make or use the invention commensurate in scope with these claims.
9. Claims 18-20 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for usage values (see para. 22 of the instant specification), does not reasonably provide enablement for 'threshold usage' and 'actual

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usage' values. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make or use the invention commensurate in scope with these claims.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. Referring to claims 1, 21, 24, and 37, the limitation "determining a level of access value for each node" is recited. It is unclear as to whether the level of access refers to an 'actual access' value or an 'average access' value, as depicted in Fig. 2A-2B.

12. Referring to claim 18, the limitation "merging said first node with a related lateral node" is recited in line 12 of the claim. However, it is unclear as to what is meant by a lateral node in the claimed dynamic taxonomy that does not claim to have a hierarchical structure. Examiner asserts that a taxonomy structure (i.e. hierarchy) is required in order to have a lateral node present. In the interest of compact prosecution, Examiner will assume that the dynamic taxonomy contains a hierarchical structure.

13. Referring to claim 18, the limitations "determining a threshold usage value" and "determining an actual usage value" are recited. However, these usage values are not provided for in the specification and therefore render the limitations to be unclear. In the

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interest of compact prosecution, Examiner will assume that the threshold usage value is a threshold access value and that the actual usage value is a level of access value.

Any claims not mentioned are also rejected due to their dependency upon the above-mentioned claims.

Due to the number of 35 USC § 112 rejections, the examiner has provided a number of examples of the claim deficiencies in the above rejections; however, the list of rejections may not be all-inclusive. Applicant should refer to these rejections as examples of deficiencies and should make all the necessary corrections to eliminate the 35 USC § 112 problems and place the claims in proper format.

Due to the vagueness and a lack of clear definition of the terminology and phrases used in the specification and claims, the claims have been treated on their merits as best understood by the examiner.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

15. Claims 18 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent Number 6,742, 003 B2 issued to Heckerman et al (hereafter Heckerman).

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16. Referring to claims 18 and 21, Heckerman discloses:

Logic encoded in media and method for adaptably maintaining a dynamic taxonomy ('automatic categorization of clusters and summarization of clusters into segments', Abstract; Background; automatic generation of clusters, col. 21, lines 43-55; col. 26, lines 53-57) defined by a plurality of nodes (col. 7, lines 23-25; col. 7, lines 40-45) arranged hierarchically ('hierarchical organizations', see Background; 'similarity graphs', 'hierarchical maps', col. 4, line 61- col. 5, line 14; Fig 2-4; 'segment hierarchy', col. 21, lines 55-67), and operable to:

- determine a threshold access value for each node (Fig. 2B, col. 9, lines 4-12) of said plurality of nodes ('similarity threshold' selection by user, col. 7, lines 10-28; col. 9, lines 12-17);
- determine a level of access value for each node of said plurality of nodes (measure of 'similarity', col. 8, lines 11-17; col. 15- col. 19, line 23);
- compare said level of access value for a first node of said plurality of nodes with said threshold access value for said first node of said plurality of nodes (Fig. 3H, col. 12, line 40- col. 12, line 2; Fig. 18), and
if said level of access value for said first node is less than said threshold access value for said first node (col. 9, lines 13-17), merge said first node with a related node ('combining' categories, col. 10, lines 5-25, Fig. 2E) arranged laterally to said first node in said hierarchical arrangement (col. 5, lines 34-41; col. 7, lines 31-60; col. 22, lines 1-15, Fig. 15; col. 25, lines 28-67).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heckerman as applied to claims 18 and 21 above, in view of US Patent Number 5,701,467 issued to Freeston.

Referring to claims 19 and 22, Heckerman discloses all of the above claimed subject matter and also discloses the merging of segments within a segment hierarchy depending upon scored similarity measures. The merged segments with the closest similarity measures are merged to form a higher-level group, i.e. the merged node is promoted to a higher level (col. 25, lines 28-67).

However, Heckerman is silent as to the promotion of a first node to a higher level in the hierarchical arrangement than a second node if the level of access value for the first node is greater than the threshold access value for the second node.

Freeston teaches analogous art wherein a first node is promoted to a higher level in a hierarchical arrangement ('indexing of a data space containing a hierarchical structure', see Abstract; col. 1, lines 41-53; col. 2, lines 28-53) than a second node if the index node of the first node overflows, that is, when it exceeds the 'fan out ratio F' of the second node (col. 5, lines 18-62; col. 14, lines 6-38, Fig. 16b-c).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Heckerman to include promotion of a first node to a higher level in the hierarchical arrangement than a second node if the level of access value for the first node is greater than the threshold access value for the second node, as taught by Freeston.

The ordinary skilled artisan would have been motivated to modify Heckerman per the above for the purpose of providing a hierarchical index structure that enables efficient retrieval of information from the memory relating to a specified point in the data space (col. 4, lines 5-12). Additional motivation could include the promotion of partitions at index tree levels in order to avoid problems with maintaining a splitting balance when partitions in a tree overflow (col. 19, lines 59-67).

18. Claims 20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heckerman as applied to claims 18 and 21 above, in view of US Patent Number 6,631,496 B1 issued to Li et al (hereafter Li).

Referring to claims 20 and 23, Heckerman discloses all of the above claimed subject matter and also discloses the splitting of categories when a user moves a vertical threshold slider down thereby decreasing the similarity threshold value (col. 9, lines 13-22, Fig. 2C¹; col. 10, lines 5-26, Fig. 2E).

However, Heckerman is silent as to the demoting of the first node to a lower level in the hierarchical arrangement than a second node.

Li teaches analogous art wherein nodes are split into child nodes when the number of documents in an existing node exceeds a predetermined number of documents (col. 2, lines 12-19). Li also teaches that when splitting a document, the invention keeps frequently accessed documents in the node, while pushing less frequently accessed documents to a lower level (col. 12, lines 43-46).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Heckerman to include demoting a first node to a lower level in a hierarchical arrangement than a second node, as taught by Li.

The ordinary skilled artisan would have been motivated to modify Heckerman per the above for the purpose of allowing a user to build and organize a large collection of bookmarks that can be reasonably maintained (col. 1, lines 53-55).

19. Claims 1, 24, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heckerman, in view of Freeston and further in view of Li.

20. Referring to claims 1, 24, and 37, Heckerman discloses:

Computer-implemented systems, method and logic encoded in media for adaptably maintaining a dynamic taxonomy ('automatic categorization of clusters and summarization of clusters into segments', Abstract; Background; automatic generation of clusters, col. 21, lines 43-55; col. 26, lines 53-57) defined by a plurality of nodes (col. 7, lines 23-25; col. 7, lines 40-45) arranged hierarchically ('hierarchical organizations', see Background; 'similarity graphs', 'hierarchical

¹ Refer to cited example wherein moving the vertical threshold slider down decreases the similarity

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maps', col. 4, line 61- col. 5, line 14; Fig 2-4; 'segment hierarchy', col. 21, lines 55-67), comprising a processor and a data storage unit coupled to said processor, said data storage unit operable to store said taxonomy, said processor in association with said data storage unit operable to:

- determine a threshold access value for each node (Fig. 2B, col. 9, lines 4-12) of said plurality of nodes ('similarity threshold' selection by user, col. 7, lines 10-28; col. 9, lines 12-17);
- determine a level of access value for each node of said plurality of nodes (measure of 'similarity', col. 8, lines 11-17; col. 15- col. 19, line 23);
- compare said level of access value for a first node of said plurality of nodes with said threshold access value for said first node of said plurality of nodes (Fig. 3H, col. 12, line 40- col. 12, line 2; Fig. 18), and

if said level of access value for said first node is less than said threshold access value for said first node (col. 9, lines 13-17), merge said first node with a related node ('combining' categories, col. 10, lines 5-25, Fig. 2E) arranged laterally to said first node in said hierarchical arrangement (col. 5, lines 34-41; col. 7, lines 31-60; col. 22, lines 1-15, Fig. 15; col. 25, lines 28-67).

21. Referring to claims 1, 24, and 37, Heckerman discloses all of the above claimed subject matter and also discloses the merging of segments within a segment hierarchy depending upon scored similarity measures. The merged segments with the closest

threshold and enables the similarity between category "enterprise" and category "ie support" to be greater

similarity measures are merged to form a higher-level group, i.e. the merged node is promoted to a higher level (col. 25, lines 28-67).

However referring to claims 1, 24, and 37, Heckerman is silent as to the promotion of a first node to a higher level in the hierarchical arrangement than a second node if the level of access value for the first node is greater than the threshold access value for the second node.

Referring to claims 1, 24, and 37, Freeston teaches analogous art wherein a first node is promoted to a higher level in a hierarchical arrangement ('indexing of a data space containing a hierarchical structure', see Abstract; col. 1, lines 41-53; col. 2, lines 28-53) than a second node if the index node of the first node overflows, that is, when it exceeds the 'fan out ratio F' of the second node (col. 5, lines 18-62; col. 14, lines 6-38, Fig. 16b-c).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Heckerman to include promotion of a first node to a higher level in the hierarchical arrangement than a second node if the level of access value for the first node is greater than the threshold access value for the second node, as taught by Freeston.

The ordinary skilled artisan would have been motivated to modify Heckerman per the above for the purpose of providing a hierarchical index structure that enables efficient retrieval of information from the memory relating to a specified point in the data space (col. 4, lines 5-12). Additional motivation could include the promotion of partitions

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at index tree levels in order to avoid problems with maintaining a splitting balance when partitions in a tree overflow (col. 19, lines 59-67).

22. Referring to claims 1, 24, and 37, Heckerman/Freeston discloses all of the above claimed subject matter and also discloses the splitting of categories when a user moves a vertical threshold slider down thereby decreasing the similarity threshold value (see Heckerman, col. 9, lines 13-22, Fig. 2C²; col. 10, lines 5-26, Fig. 2E).

However referring to claims 1, 24, and 37, Heckerman/Freeston is silent as to the demoting of the first node to a lower level in the hierarchical arrangement than a second node.

Referring to claims 1, 24, and 37, Li teaches analogous art wherein nodes are split into child nodes when the number of documents in an existing node exceeds a predetermined number of documents (col. 2, lines 12-19). Li also teaches that when splitting a document, the invention keeps frequently accessed documents in the node, while pushing less frequently accessed documents to a lower level (col. 12, lines 43-46).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Heckerman/Freeston to include demoting a first node to a lower level in a hierarchical arrangement than a second node, as taught by Li.

The ordinary skilled artisan would have been motivated to modify Heckerman/Freeston per the above for the purpose of allowing a user to build and

² Refer to cited example wherein moving the vertical threshold slider down decreases the similarity threshold and enables the similarity between category "enterprise" and category "ie support" to be greater than the threshold.

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organize a large collection of bookmarks that can be reasonably maintained (col. 1, lines 53-55).

23. Referring to claim 2, Heckerman/Freeston/Li discloses that the threshold access value comprises a threshold user access value, said level of access value comprises a level of user access value, and said user includes at least a person, automatic browsing device, or data collection device (refer to discussion of limitations 1 and 2 of claim 1 above).

24. Referring to claims 3 and 25, Heckerman/Freeston/Li discloses usage of information content associated with each node (refer to discussion of limitation 2 of claim 1 above with reference to the calculation of similarity for each node).

25. Referring to claims 5 and 27, Heckerman/Freeston/Li discloses merging said first node with a related node arranged laterally to said first node in said hierarchical arrangement comprises retiring said first node and combining a content of said first node with a content of said related node (refer to Heckerman, col. 25, lines 28-67, in particular, lines 62-65).

26. Referring to claims 6 and 28, Heckerman/Freeston/Li discloses a related node arranged laterally to said first node and comprises a node arranged in parallel and in a same category with said first node (refer to Heckerman, col. 11, lines 3-23, leaf nodes 305 and 306 are arranged laterally as base categories and fall under non-leaf node category 312 in Fig. 3A; nodes 305 and 306 are also arranged laterally as base categories in Fig. 3B).

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27. Referring to claims 7 and 29, Heckerman/Freeston/Li discloses a plurality of nodes arranged hierarchically as a tree structure (refer to Heckerman, Fig. 3A, col. 11, lines 1-8).

28. Referring to claims 8 and 30, Heckerman/Freeston/Li discloses a top-down multi-level taxonomy (In light of the instant specification which describes a taxonomy as a tree of information nodes in para. 3, refer to Heckerman, col. 10, lines 47-61, Fig. 3A-K; also refer to discussion of claims 7 and 29 above).

29. Referring to claims 9 and 31, Heckerman/Freeston/Li discloses node identification by a proximity feature associated with said first node and said related node (refer to discussion of limitation 2 of claim 1 above with respect to 'measure of similarity').

30. Referring to claims 13 and 33, Heckerman/Freeston/Li discloses a product catalog database (refer to Heckerman, col. 3, line 2-7).

31. Claims 4 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heckerman in view of Freeston, in view of Li, as applied to claims 1 and 24 above, and further in view of US Patent Number 6,470,344 B1 issued to Kothuri et al (hereafter Kothuri).

Referring to claims 4 and 26, the combination of Heckerman/Freeston/Li discloses all of the above claimed subject matter but fails to disclose determining a sum of user access requests to each node and at least one child of said each node plus a sum of searches or queries performed wherein a result of said searches or queries

includes at least one of said each node or a content of said at least one of said each node

However Kothuri discloses analogous art wherein determination is made as to a sum of user access requests to each node and at least one child of said each node and a sum of searches or queries performed wherein a result of said searches or queries includes at least one of said each node or a content of said at least one of said each node (refer to Abstract; col. 4, lines 38-48; col. 25, lines 24-43; col. 26, lines 21-39, Fig. 8A). Referring to Fig. 8A and the cited areas above, Kothuri teaches a buffering technique in which counters are incremented each time a node is accessed and as queries are performed, thus keeping count of the number of times a node is accessed and the number of queries performed.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Heckerman/Freeston/Li to include determining a sum of user access requests to each node and at least one child of said each node and a sum of searches or queries performed wherein a result of said searches or queries includes at least one of said each node or a content of said at least one of said each node, as taught by Kothuri.

The ordinary skilled artisan would have been motivated to further modify Heckerman/Freeston/Li per the above for the purpose of using the buffering technique of Kothuri in environments in which data operations are not uniformly distributed within the dataspace, to be able to efficiently retrieve multi-dimensional/multi-attribute data and buffer data as database queries are processed (col. 3, lines 12-15; col. 4, lines 46-48).

32. Claims 10, 11, 12, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heckerman in view of Freeston, in view of Li, as applied to claims 1 and 24 above, and further in view of US Publication Number 2002/0083067 A1 by Tamayo et al (hereafter Tamayo).

33. Referring to claims 10, 11, 12, and 32, the combination of Heckerman/Freeston/Li discloses all of the above claimed subject matter but fails to disclose:

- a sum of different IP addresses computed for a predetermined interval of time (claims 10, 11, and 32); and
- a sum of different devices' Ids computed for a predetermined interval of time (claim 12).

34. However Tamayo discloses analogous art wherein :

- a sum of IP addresses is computed for a predetermined interval of time (para. 102 and 109) (claims 10, 11, and 32); and
- a sum of different devices' Ids computed for a predetermined interval of time ('code identifying browser and operating system used to make request', para. 102) (claim 12).

35. It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Heckerman/Freeston/Li to include a sum of IP addresses and a sum of different devices' Ids computed for a predetermined interval of time, as taught by Tamayo.

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The ordinary skilled artisan would have been motivated to further modify Heckerman/Freeston/Li per the above for the purpose of using TCP/IP packet sniffing over traditional log files to provide real time data collection, to capture information not found in log files, and because packet sniffing can support any Web server as it is independent of log file format and underlying operating system (see para. 102).

36. Claims 14 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heckerman in view of Freeston, in view of Li, as applied to claims 1 and 24 above, and further in view of US Patent Number 5,950,173 issued to Perkowski.

Referring to claims 14 and 34, the combination of Heckerman/Freeston/Li discloses all of the above claimed subject matter but fails to disclose a taxonomy comprising a WWW directory.

However, Perkowski discloses analogous art that includes a taxonomy comprising a WWW directory ('categorically arranged URL menus', Abstract; 'Internet Product Directory', col. 5, lines 10-43).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Heckerman/Freeston/Li to include a taxonomy comprising a WWW directory, as taught by Perkowski.

The ordinary skilled artisan would have been motivated to further modify Heckerman/Freeston/Li per the above for the purpose of allowing consumer-product manufacturers, their advertisers, distributors and retailers that are linked to the consumers of such products at the end of the supply and demand chain access to

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consumer-product information virtually 24 hours a day, seven days a week (col. 5, lines 35-43). Additional motivation for further modifying Heckerman/Freeston/Li is to provide an improved method for transmitting and delivering product related information between manufacturers and retailers of products to the consumers (col. 4, lines 48-55).

37. Claims 15 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heckerman in view of Freeston, in view of Li, as applied to claims 1 and 24 above, and further in view of US Patent Number 6,055,515 issued to Consentino et al (hereafter Consentino).

Referring to claims 15 and 35, the combination of Heckerman/Freeston/Li discloses all of the above claimed subject matter but fails to disclose advertisement pricing information.

However Consentino discloses analogous art that includes advertisement pricing information (Abstract; Summary, lines 57-64; col. 13, lines 9-57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Heckerman/Freeston/Li to include advertisement pricing information, as taught by Consentino.

The ordinary skilled artisan would have been motivated to further modify Heckerman/Freeston/Li per the above for the purpose of making it easier for a user to relate a product number in a database with its description through configurable node labels that contain pricing as one of their attributes. In addition the invention of Consentino enhances the tree control's ability to navigate data structures by providing

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the user with more useful information so that the product number and its related name are displayed at the same time (col. 7, line 48- col. 8, line 18).

38. Claims 16 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heckerman in view of Freeston, in view of Li, as applied to claims 1 and 24 above, and further in view of US Patent Number 6,243,750 B1 issued to Verma.

Referring to claims 16 and 36, the combination of Heckerman/Freeston/Li discloses all of the above claimed subject matter but fails to disclose a dynamic pricing map based on usage.

However Verma discloses analogous art wherein a dynamic pricing map is used to determine the number of hits on a website because the cost of advertisement space on a web page is directly related to the popularity or number of hits each web site receives (see Background; col. 1, line 45- col. 2, line 22; col. 2, lines 55-67; col. 4, lines 1-13; col. 6, lines 1-26).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Heckerman/Freeston/Li to include dynamic pricing map based on usage, as taught by Verma.

The ordinary skilled artisan would have been motivated to further modify Heckerman/Freeston/Li per the above for the purpose of provide reliable measurement of advertisement effectiveness on the Web when using advertising agencies and to measure hits on a web site without the requirement to constantly engage the advertiser (col. 4, lines 55-67).

39. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Heckerman in view of Freeston, in view of Li, as applied to claim 1 above, and further in view of US Publication Number 2003/0059029 A1 issued to Mengshoel et al (hereafter Mengshoel).

Referring to claim 17, the combination of Heckerman/Freeston/Li discloses all of the above claimed subject matter but fails to disclose a call center resource allocation map based on usage.

However, Mengshoel discloses analogous art wherein calls to a call center are classified in order to be allocated among the agents of the center (Abstract; para. 2, 11, 12, 24-26, 28-31, and 41).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Heckerman/Freeston/Li to include call center resource allocation map based on usage, as taught by Mengshoel.

The ordinary skilled artisan would have been motivated to further modify Heckerman/Freeston/Li per the above for the purpose of enabling the assignment of agents to be more flexible when routing the agents according to skill (para. 11).

Conclusion

40. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl M Fernandes whose telephone number is (703) 305-3917. The examiner can normally be reached on 9:00 am - 5:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on (703) 308-1436. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CMF
July 1, 2004


WAYNE AMSBURY
PRIMARY PATENT EXAMINER